

***What Is Claimed Is:***

1. An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:

(a) a nucleotide sequence encoding the IL17RLP polypeptide having the complete amino acid sequence in SEQ ID NO:2 (i.e., positions -19 to 407 of SEQ ID NO:2);

(b) a nucleotide sequence encoding the IL17RLP polypeptide having the complete amino acid sequence in SEQ ID NO:2 excepting the N-terminal methionine (i.e., positions -18 to 407 of SEQ ID NO:2);

(c) a nucleotide sequence encoding the predicted mature IL17RLP polypeptide having the amino acid sequence at positions 1 to 407 in SEQ ID NO:2;

(d) a nucleotide sequence encoding a polypeptide comprising the predicted extracellular domain of the IL17RLP polypeptide having the amino acid sequence at positions 272 to 292 in SEQ ID NO:2;

(e) a nucleotide sequence encoding a soluble IL17RLP polypeptide having the predicted extracellular and intracellular domains, but lacking the predicted transmembrane domain;

(f) a nucleotide sequence encoding the IL17RLP polypeptide having the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209198;

(g) a nucleotide sequence encoding the IL17RLP polypeptide having the complete amino acid sequence excepting the N-terminal methionine encoded by the cDNA clone contained in ATCC Deposit No. 209198;

(h) a nucleotide sequence encoding the mature IL17RLP polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209198;

(i) a nucleotide sequence encoding the extracellular domain of the IL17RLP polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209198; and

(j) a nucleotide sequence complementary to any of the nucleotide sequences in (a), (b), (c), (d), (e), (f), (g), (h) or (i) above.

2. The nucleic acid molecule of claim 1 wherein said polynucleotide has the complete nucleotide sequence in Figures 1A, 1B, and 1C (SEQ ID NO:1).

3. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence in Figures 1A, 1B, and 1C (SEQ ID NO:1) encoding the IL17RLP polypeptide having the amino acid sequence in positions -19 to 407 of SEQ ID NO:2.

4. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence in Figures 1A, 1B, and 1C (SEQ ID NO:1) encoding the IL17RLP polypeptide having the amino acid sequence in positions -18 to 407 of SEQ ID NO:2.

5. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence in Figures 1A, 1B, and 1C (SEQ ID NO:1) encoding the mature IL17RLP polypeptide having the amino acid sequence from about 1 to about 407 in SEQ ID NO:2.

6. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence in Figures 1A, 1B, and 1C (SEQ ID NO:1) encoding the extracellular domain of the IL17RLP polypeptide having the amino acid sequence from about 1 to about 407 in SEQ ID NO:2.

7. An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:

(a) a nucleotide sequence encoding a polypeptide comprising the amino acid sequence of residues n-407 of SEQ ID NO:2, where n is an integer in the range of -19-5;

(b) a nucleotide sequence encoding a polypeptide comprising the amino acid sequence of residues -19-m of SEQ ID NO:2, where m is an integer in the range of 340-407;

(c) a nucleotide sequence encoding a polypeptide having the amino acid sequence consisting of residues n-m of SEQ ID NO:2, where n and m are integers as defined respectively in (a) and (b) above; and

(d) a nucleotide sequence encoding a polypeptide consisting of a portion of the complete IL17RLP amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209198 wherein said portion excludes from 1 to about 23 amino acids from the amino terminus of said complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209198;

(e) a nucleotide sequence encoding a polypeptide consisting of a portion of the complete IL17RLP amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209198 wherein said portion excludes from 1 to about 67 amino acids from the carboxy terminus of said complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209198; and

(f) a nucleotide sequence encoding a polypeptide consisting of a portion of the complete IL17RLP amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209198 wherein said portion include a combination of any of the amino terminal and carboxy terminal deletions in (d) and (e), above.

8. The nucleic acid molecule of claim 1 wherein said polynucleotide has the complete nucleotide sequence of the cDNA clone contained in ATCC Deposit No. 209198.

9. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence encoding the IL17RLP polypeptide having the complete amino acid sequence excepting the N-terminal methionine encoded by the cDNA clone contained in ATCC Deposit No. 209198.

10. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence encoding the mature IL17RLP polypeptide having the

amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209198.

11. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence encoding the extracellular domain of the IL17RLP polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209198.

12. An isolated nucleic acid molecule comprising a polynucleotide which hybridizes under stringent hybridization conditions to a polynucleotide having a nucleotide sequence identical to a nucleotide sequence in (a), (b), (c), (d), (e), (f), (g), (h), (i) or (j) of claim 1 wherein said polynucleotide which hybridizes does not hybridize under stringent hybridization conditions to a polynucleotide having a nucleotide sequence consisting of only A residues or of only T residues.

13. An isolated nucleic acid molecule comprising a polynucleotide which encodes the amino acid sequence of an epitope-bearing portion of a IL17RLP polypeptide having an amino acid sequence in (a), (b), (c), (d), (e), (f), (g), (h) or (i) of claim 1.

14. The isolated nucleic acid molecule of claim 13, which encodes an epitope-bearing portion of a IL17RLP polypeptide wherein the amino acid sequence of said portion is selected from the group of sequences in SEQ ID NO:2 consisting of: about Ser-14 to about Val-22, about Cys-24 to about Pro-32, about Ile-41 to about Arg-49, about Thr-89 to about Val-97, about Thr-110 to about Lys-118, about Ala-144 to about Ser-152, about Thr-240 to about Val-248, about Gly-258 to about Thr-267, about Leu-280 to about Gly-288, about Cys-404 to about Glu-412, about Pro-415 to about Ser-423, about Gly-409 to about Glu-417, and about Cys-404 to about Leu-426.

15. A method for making a recombinant vector comprising inserting an isolated nucleic acid molecule of claim 1 into a vector.

16. A recombinant vector produced by the method of claim 15.
17. A method of making a recombinant host cell comprising introducing the recombinant vector of claim 16 into a host cell.
18. A recombinant host cell produced by the method of claim 17.
19. A recombinant method for producing a IL17RLP polypeptide, comprising culturing the recombinant host cell of claim 18 under conditions such that said polypeptide is expressed and recovering said polypeptide.
20. An isolated IL17RLP polypeptide comprising an amino acid sequence at least 95% identical to a sequence selected from the group consisting of:
- (a) the amino acid sequence of the full-length IL17RLP polypeptide having the complete amino acid sequence shown in SEQ ID NO:2 (i.e., positions -19 to 407 of SEQ ID NO:2);
  - (b) the amino acid sequence of the full-length IL17RLP polypeptide having the complete amino acid sequence shown in SEQ ID NO:2 excepting the N-terminal methionine (i.e., positions -18 to 407 of SEQ ID NO:2);
  - (c) the amino acid sequence of the mature IL17RLP polypeptide having the complete amino acid sequence shown in SEQ ID NO:2 (i.e., positions 1 to 407 of SEQ ID NO:2);
  - (d) the amino acid sequence of the predicted extracellular domain of the IL17RLP polypeptide having the complete amino acid sequence shown in SEQ ID NO:2 (i.e., positions 1 to 271 of SEQ ID NO:2);
  - (e) the amino acid sequence of a soluble IL17RLP polypeptide having the predicted extracellular and intracellular domains, but lacking the predicted transmembrane domain;
  - (f) the complete amino acid sequence encoded by the cDNA clone contained in the ATCC Deposit No. 209198;

(g) the complete amino acid sequence excepting the N-terminal methionine encoded by the cDNA clone contained in the ATCC Deposit No. 209198;

(h) the complete amino acid sequence of the mature IL17RLP encoded by the cDNA clone contained in the ATCC Deposit No. 209198, and;

(i) the complete amino acid sequence of the extracellular domain of the IL17RLP encoded by the cDNA clone contained in the ATCC Deposit No. 209198.

21. An isolated polypeptide comprising an epitope-bearing portion of the IL17RLP protein, wherein said portion is selected from the group consisting of:

(a) a polypeptide comprising amino acid residues from about Ser-14 to about Val-22 in SEQ ID NO:2,

(b) a polypeptide comprising amino acid residues from about Cys-24 to about Pro-32 in SEQ ID NO:2,

(c) a polypeptide comprising amino acid residues from about Ile-41 to about Arg-49 in SEQ ID NO:2,

(d) a polypeptide comprising amino acid residues from about Thr-89 to about Val-97 in SEQ ID NO:2,

(e) a polypeptide comprising amino acid residues from about Thr-110 to about Lys-118 in SEQ ID NO:2,

(f) a polypeptide comprising amino acid residues from about Ala-144 to about Ser-152 in SEQ ID NO:2,

(g) a polypeptide comprising amino acid residues from about Thr-240 to about Val-248 in SEQ ID NO:2,

(h) a polypeptide comprising amino acid residues from about Gly-258 to about Thr-267 in SEQ ID NO:2,

(i) a polypeptide comprising amino acid residues from about Leu-280 to about Gly-288 in SEQ ID NO:2,

(j) a polypeptide comprising amino acid residues from about Cys-404 to about Glu-412 in SEQ ID NO:2,

(k) a polypeptide comprising amino acid residues from about Pro-415 to about Ser-423 in SEQ ID NO:2,

(l) a polypeptide comprising amino acid residues from about Gly-409 to about Glu-417 in SEQ ID NO:2, and

(m) a polypeptide comprising amino acid residues from about Cys-404 to about Leu-426.

22. An isolated antibody that binds specifically to a IL17RLP polypeptide of claim 20.

23. An isolated nucleic acid molecule comprising a polynucleotide having a sequence at least 95% identical to a sequence selected from the group consisting of:

(a) the nucleotide sequence of SEQ ID NO:4;

(b) the nucleotide sequence of SEQ ID NO:5;

(c) the nucleotide sequence of a portion of the sequence shown in Figures 1A, 1B, and 1C (SEQ ID NO:1) wherein said portion comprises at least 50 contiguous nucleotides from nucleotide 50 to nucleotide 650;

(d) the nucleotide sequence of a portion of the sequence shown in Figures 1A, 1B, and 1C (SEQ ID NO:1) wherein said portion consists of nucleotides 50-1800, 100-1800, 200-1800, 300-1800, 400-1800, 500-1800, 600-1800, 50-650, 100-650, 200-650, 300-650, 400-650, 500-650, 50- 500, 100-500, 200-500, 300-500, 400-500, 50-400, 100-400, 200-400, 300-400, 50-300, 100-300, 200-300, 50-200, 100-200, and 50-100; and

(e) a nucleotide sequence complementary to any of the nucleotide sequences in (a), (b), (c) or (d) above.